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Review

Introduction: Human-nature Interactions through a Multispecies Lens

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Abstract

This introduction brings together a group of papers focusing on conservation theory and practice, and argues strongly for a new place-based conservation through a multispecies lens. Honouring the work of Brian Morris, a scholar who has consistently forged a persuasive set of conceptual connections between science and society, and building on his insights into environmental history and human-nature interactions, we outline a vision of conservation that incorporates new narratives – at the intersection between the ecological and the social – to reimagine the world in the Anthropocene. This includes challenging the persistence of fortress, neoprotectionist and other top-down forms of conservation, through a recognition that conservation is deeply rooted in (human, nonhuman and more-than-human) senses of place. The introduction urges scholars to focus on landscapes as units of analysis: 'multispecies assemblages' that are easily overlooked at other spatial and historical scales. It calls for increased attention to the contact zones where the lives of humans and other species biologically, culturally and politically intersect, as a counterpoint to the dominant planetary perspective of earth systems and conservation science. It underlines the importance of deep relational analyses of human interactions with other life forms, through renewed attention to multispecies histories, locality, and forms of knowledge rooted in place. It is at this level, through historically nuanced accounts founded on a more place-based conception of ourselves as a species, that new narratives and answers to our current predicament will emerge.

Keywords: anthropology, environmental history, multispecies ethnography, human-nature interactions, symbolism, place-based conservation

FIELD OF ENQUIRY

This special issue brings together the work of leading international anthropologists and environmental historians across South Asia, Southeast Asia and Africa to address issues of human-animal/plant interactions in the Global South. It honours the work of Brian Morris and recognises his seminal contributions to symbolism, environmental history, conservation, ecological systems, and resource politics. While Brian Morris has made significant contributions to other fields of anthropology, in this issue we draw attention to and engage with his investigations of human-animal/plant relations and symbolism in the context of environmental history and environmental anthropology. All the papers in this Special Section relate to three central themes:

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Theme 1. Multispecies Ethnography

Over his long career in anthropology, Brian Morris has developed a consistently persuasive set of conceptual connections between science (biology, animal studies, conservation) and society (environmental history, political ecology and political economy). The term itself - multispecies - is an established term within conservation ecology and resonates with Morris's own emphasis on anthropology as a cosmopolitan project that offers a 'bridge between the natural sciences and humanities' (2014: 50). For Morris,

> 'Human life is inherently social and meaningful, as well as being "enmeshed" or "rooted" in the natural world.

> An understanding of human life therefore entails both hermeneutic understanding and interpretation (humanism) as well as explanations in terms of causal mechanisms and historical understanding (naturalism)' (Morris 2014: 51).

Many of his ethnographic studies take place at the dynamic confluence of human and more-than-human socialites, a term that situates itself at the juncture between biological, cultural and political modes of analysis; multispecies scholarship has become a significant new wave of scholarship addressing human interactions with animals, plants and other life forms in what scholars once unproblematically called 'nature' or 'the natural world'. For this reason, we consider Brian Morris an important intellectual ancestor for the rapidly emerging subfield of multispecies ethnography and an inspiration for all the papers in this issue.

Progressing beyond the traditional theoretical subjugation of animals to totems, symbols and other passive tools of human world-making encapsulated in Lévi-Strauss's anthropocentric slogan that animals are 'good to think' (1971: 89), multispecies ethnography has begun to explore the more intimate 'contact zones' (Haraway 2008: 244) where human and animal lives biologically, culturally and politically intertwine. Foregrounding coexistence, conviviality and interactional encounters between humans and nonhumans, such studies have begun to explore the complex multispecies intersubjectivities in which all human lives and cultures are enmeshed. A softening of the nature-culture dyad lodged deep in the history of ideas from which the social sciences and natural sciences emerged, and a parallel post-symbolic turn in anthropology beyond the 'individual enrollment of animals as human tools' (Tsing 2013a: 36), has cleared the way for a new reflexive analysis. Multispecies ethnographers have begun to explore the points of contact where nonhuman vitalities enter, blend with and coproduce 'human' realities. Foregrounding the interspecies 'encounters' that inform human world-making (Faier and Rofel 2014), they are now exploring the beneficial, and at times, the turbulent and destructive entanglements that occur as multispecies landscapes assemble and emerge.

Theme 2. Symbolism and Place-Based Knowledge

Place has emerged in recent years 'as one of the most inclusive ways to frame the changing practice of natural resource conservation' (Williams et al. 2013). As each of the papers in this issue demonstrate, senses of place and place-based knowledge critically inform the priorities of different human groups, including what they choose to conserve, for how long, and for whom (Ellen et al. 2000). Place-based conservation relies on detailed empirical analysis of how people derive meaning and identity from places (Adger et al. 2011: 2).

This issue links directly to Brian Morris' work, including his rejection of symbolism as a free floating semiotic domain in favour of detailed study of how symbolism and taxonomies are rooted in concrete human practices, power relations, environmental histories, and material agencies of place. Taking his work as inspiration, each paper in this issue examines how diverse, and at times conflicting, human stakeholders interact with critical symbols and meanings in their ongoing negotiations and relationships with other life forms.

Adopting a place-based 'view from somewhere' that focusses on local interactions and the way different species 'become with' other species, not a generic technical 'view from nowhere', as is all too common (Williams et al. 2013: 9), place-based conservation converges in important ways with notions of biocultural diversity and the interactive co-evolution of human communities with other species (Maffi 2001; Parkin and Ulijaszek 2007). Such a focus is implicit in much of Brian's work and is a cornerstone of multi-species ethnography and new conservation thinking.

Theme 3. Environmental History and Change

Through its *World Social Science Report 2013*, UNESCO recently issued 'an urgent and decisive appeal to the social sciences to research more effectively the human causes, vulnerabilities and impacts of environmental change, and thus to inform societal responses to the sustainability challenges that society now faces' (Hackmann and Moser 2013: 34). The report identifies 'historical and contextual complexity' as Cornerstone 1 of its thematic framework. This is closely aligned with the approach taken by contributors to this issue, all of whom offer historically nuanced accounts of the mutual relations between humans and the more-than-human world. As such they contribute to environmental history, an interdisciplinary project that emerged at the confluence of ecology, geography, archaeology, anthropology and the humanities, and which is today among the fastest growing subfields within professional history writing.

Environmental history carries with it a conviction that the history of humanity and the history of the environment only make sense if explored together (McNeill 2000); an approach closely aligned with Brian Morris' extensive theorisation of the dialectical relations between human societies and their environments. Multispecies scholars frame this as 'human histories within a multispecies field of histories' (Tsing 2013a: 33). Situating analysis at the critical intersection of institutional top-down frameworks and bottom-up collective meanings, values and obligations, the papers in this issue build on Brian Morris' insights into how animals, plants and larger scale multispecies assemblages[1] mediate social structures and historically inform cultural representations.

Human-Nature Interactions in the Anthropocene

The study of human-nature interactions is one of the most interdisciplinary fields of research. As editors of this issue, one of whom is an anthropologist and one of whom is an environmental historian, we are convinced that the practice of conservation must occur at the confluence of multispecies studies and environmental history. Environmental history, as Richard Grove suggests, documents stories not just of humans but of species and societies, others and our own, through the epistemic lens of their relationships with the world about

them (Grove et al. 1998). Between the mid-nineteenth and mid-twentieth century, the idea of environmental history was primarily oriented in the form of historical geography, culminating in the issue entitled 'Man's role in changing the face of the Earth', published in 1956 under W.L. Thomas. In North America and Europe, environmental history as a special subject arose as an offshoot of post-war environmentalism which first made itself felt as a mass movement in the 1960s. Rachel Carson's *The Sea around us* (1951) and her *Silent Spring* (1962) amounted to a clarion call for the new environmentalism and for the emergence of a discrete new discipline.

For environmental historians, the recent 'discovery' of the Anthropocene comes as a surprise. After all, the concept of anthropogenic climate and environmental change is a given, a core subject of study (Grove et al. 1998). However, the formal identification of the Anthropocene as a new geological era in Earth's history in which humans have become the defining geological force foregrounds that 'humanity has become a planetary force, reshaping Earth systems in highly consequential and long-lasting ways' (van Dooren 2012: 231). As recognised by a growing number of scholars, the Anthropocene also 'challenges us all to radically rethink nature and humans as well as the political and historical relationship between them' (Haraway et al. 2016). It demands we 'think and imagine on a wholly different scale, vastly more global in scope, vastly more historical in extent... [and] take seriously the specific responsibilities that arise from this shifting of perspectives' (Garrard et al. 2014). Marking an age or geological epoch of unprecedented anthropogenic disturbance of the earth's ecosystems, including rapid and unpredictable climate change and a wave of species extinctions, the Anthropocene alters how we frame our species historically. It requires that we imagine ourselves as 'inhabitants not just of a human lifetime or generation, but also of deep time' (Macfarlane 2016). It challenges us to articulate new responses to these and other Anthropocene dilemmas.

Given the history of this sub-discipline, environmental historians are very much engaged with reframing key debates about the Anthropocene (Damodaran 2015; D'Souza 2015). Its scope is broad, focussing attention on the history of human thought about the environment, human-nature interactions over a long time frame, and the examination of dialectical changes in environments wrought through human practices, and how environmental factors in turn influence human history (Hughes 2006). In the context of recent debates about the Anthropocene, key determining areas of enquiry include how we can refigure locality and place within these planetary debates. In the words of leading multispecies scholar, Anna Tsing, The Anthropocene 'gains traction only when we combine time and space by making landscapes units of analysis' (Tsing, in Lindblad and Furmage 2016). Bringing locality and history back into debates on the Anthropocene is thus important as it focusses on issues of scale in terms of time and space, by shifting the emphasis to the locality and local effects of human induced climate and environmental change. This has far reaching implications for the current debates on climate change.

As historian Dipesh Chakrabarty has argued in a seminal article in 2009, the engagement with the concept of the Anthropocene has become a key starting point for rethinking the humanities in the era of anthropogenic climate change. He raises some key questions for historical research in the present, and for the mode in which we think historically in terms of geological time and historical time marking the end of the binary distinction between humanist and scientific knowledge that underpinned the Enlightenment rationalist project. He suggests that the distinctive political project of the Enlightenment, the pursuit of human freedom (exemplified in the form of historical consciousness that enabled both liberalism and Marxism to function as political projects) has come under threat and the debate on the Anthropocene underlines the need for a radically different kind of politics.

How do we construct this new kind of emancipatory politics? We argue that implicit in this politics is the relationship between capital and community and a critique of capital by recuperating the history of community and locality. Chakrabarty's point that given the climate crisis 'we need to put global histories of capital in conversation with the species history of humans' comes as no surprise to environmental historians who have consistently marked out their territory as,

> 'the interdisciplinary study of the relations between culture, technology and nature through time, and the story of the life and death not just of human individuals but of societies and species in terms of their relationship with the world around them.'[2]

As the environmental historian Donald Worster has noted, 'at its core, global environmental history must deal with capitalism as the pioneering, and still the most important, architect of that new integrated world economy' (Worster in Forum 2008).

Such a perspective enables a historically nuanced critique of capital through an understanding of 1) issues of power over nature and resource struggles in the *longue durée* in both a local and global context 2) alternative cosmologies vis-à-vis ideas of nature and its uses 3) the implication of the current framing of top-down debates on the Anthropocene which gloss over locality, class, gender and race, and 4) local resistance to global capital as a form of adaptation and resilience with profound implications for our political future.

This issue goes some way towards addressing the sense in which place and locality are being reconfigured in recent environmental history writing. It is important to persuade historians and natural scientists to embark not just on grand themes in environmental history and discourse analysis, but on the local small-scale histories of single communities and their experience of ecological pressures and change over time, as part of a broader social agenda aimed at local empowerment and environmental awareness.

For a long time now, a determining area of enquiry for anthropologists has been the influence of 'culture' as a mediator of human-environment interactions. From the emergence of cultural ecology in the 1950s and then in subsequent decades, ecological anthropology, environmental psychology,

ecopsychology and historical ecology, the sub-discipline of environmental anthropology has long drawn attention to close intersections between social and economic systems and the environment (Barnes et al. 2013). Anthropologists have explored not only how environments change, but also how they change us and become embedded in 'culture'. As Viveiros de Castro (2004) emphasises, as anthropologists we have repeatedly committed ourselves to tracing a line between a singular ontologically stable nature 'out there' and multiple cultures. And policy makers have integrated the idea of multiple cultures, even as anthropology has with increasing sophistication deconstructed earlier taken-for-granted conceptions of culture (Clifford 1986; Gupta and Ferguson 1992). Just as 1970s feminist anthropology went a long way in deconstructing the nature-culture binary (Ortner 1974), in recent years a growing number of leading anthropologists have deconstructed the standard appeal across the social sciences to culture as an index of human difference (Descola 2013; Latour 1993; Viveiros de Castro 2004; Wagner 1981). As Garrard et al. (2014) put it: 'concepts must be remediated to speak to the Anthropocene as a social category that positions the nonhuman and biogeochemical processes as integral to the political understanding of life'. As historian Robert Macfarlane summarises:

> 'In its unsettlement of the entrenched binaries of modernity (nature and culture; object and subject), and its provocative alienation of familiar anthropocentric scales and times [the Anthropocene] opens up new political arguments, new modes of behaviour, new narratives, new languages and new creative forms [in response to] a pressing need to re-imagine human and nonhuman life' (2016).

Whether welcomed as a gift (Latour 2014b) or derided as a dangerous act of human hubris that etymologically ignores other species (Haraway et al. 2016), the Anthropocene arrives onto the intellectual landscape demanding 'sophisticated analyses of how nature comes into being... rather than setting up a passive backdrop for human activity' (Tsing 2013a). For many multispecies scholars, it demands also that we finally discard the idea of human exceptionalism, an idea that 'blinds us to the interspecies connections that make up our own lives within our bodies and in our surroundings' (Moore 2016). It calls for recognition of the redistribution - but not disintegration - of the human agent through other life forms (Latour 2014b). It also raises the question of human responsibility in a world we share with other life forms. As Latour (2014b) puts it, 'it is as a moral character that human agency is entering the geostory of the Anthropocene'.

Anthropologists are now addressing the enormous sustainability challenges that mark the present era. The concept itself is by no means universal. For example, the closest equivalent to 'sustainable' among Maasai is 'cattle as usual' (Homewood 2015). We have to ask: what is it that needs to be sustained, who is sustaining, and for whom? Escobar (2012) offers a response: we need to sustain the 'pluriverse', a world where many worlds fit. Heterogeneity is key. Multispecies scholarship focusses our attention on world-making in the plural, across the shimmering frontier separating, and connecting, humans and other life forms.

The discipline of anthropology is well-placed to offer deep relational analyses of human interactions with other life forms and to multiply the stories we tell. Place-based conservation offers a testing ground for anthropology. As Bruno Latour argues, anthropological frameworks, such as the ontological turn, find their 'moment of truth... not on the epistemological scene but on the bittersweet attempts at negotiating alternative ways to occupy a territory, being thrown in the world' (Latour 2014a: 6).

Environmental history and multispecies ethnography share and extend this concern with place. Framed as 'multispecies gatherings in the making', landscapes offer scales of analysis that permit us to view how life forms and multispecies assemblages 'come together to negotiate collaborative survival: who lives and who dies, who stays and who goes' (Tsing, in Lindblad and Furmage 2016). Landscape offer a lens through which scholars can document how different life forms flourish or decline 'in the effects of the world-making projects initiated and maintained by the others' (Ibid.). Like cultures, landscapes are not just 'more-or-less self-contained entities rooted in particular places... but are instead made through encounters' (Swanson 2013). Like cultures, they 'do not precede encounters, but emerge out of them' (Ibid.). Simultaneously imaginative and material, and encompassing cultural and political commitments, landscapes force us to confront the multispecies assemblages that are so easily overlooked at other spatial and historical scales. Only a history and an ethnography that span the ecological and social will be able to articulate the new narratives needed to reimagine the world.

Places and landscapes offer a viable foundation also for new forms of collaboration between the natural and social sciences. The *World Social Science Report 2013* reiterates something many social scientists already know: research on global environmental change continues to be dominated by the natural sciences. However, at this inflection point in the history of human inhabitation of this planet, with multiple overlapping environmental crises, scholars in the social sciences and humanities are being called to the table. This is the hope that rises from the Pandora's Box of environmental ills of the Anthropocene: the promise of scientific renewal through cross-disciplinary collaboration and insight (Haraway et al. 2016). Anthropology and environmental history together offer a 'holistic, long-term perspective on the human story and to the global debate on environmental change' (Reuter 2013).

A cultural politics of nature raises a fundamental question over 'who speaks for nature?' All conservation programs are necessarily projects in politics and governance, and different stakeholders - conservationists, corporations, social scientists, philosophers, activists and the state - have different approaches to why nature should be conserved and also at a fundamental level what nature *is* (Brockington and Duffy 2011; Cronon 1995; Luke 1997; Neumann 1998; West et al. 2006). Whilst for some, nature may appear to be a vast wilderness filled

with endangered species to be saved or as a commodity to be traded, for many others - often the poor - nature is a source for livelihood.

Indigenous narratives need to be brought to the forefront of discourses about environmental sustainability. Through the term 'indigenous intelligence' (2009), Laura Rival captures the admiration many anthropologists feel for the diverse forms of place-based knowledge that exist across the planet. A recent international report by the United Nations Department of Economic and Social Affairs repeats a now familiar mantra:

> '[I]ndigenous peoples may have valuable lessons to offer about successful and unsuccessful adaptations which could be vital in the context of climate change' (2009:115).

Many international organisations now recognise that in many settings across the planet, indigenous biocultural knowledge underpins 'adaptation strategies that are cost-effective, participatory and sustainable' (Nuttall 2008: 6, in UNESA 2010: 115). However, calls to implement or scale up indigenous biocultural knowledge regimes are fraught with persistent dangers of abstraction[3], essentialisation, or bureaucratic erasure, as fragments of knowledge regimes are lifted up out of place and incorporated into dominant models.

Anthropologists like Brian Morris are skeptical of the 'radical alterity proposed between some indigenous peoples and western culture' (2000: 12). In the past decade, Morris observes, there has been a growing tendency among scholars to set up:

> 'a radical and rather gnostic dualism between the worldviews of hunter-gatherers (and tribal people more generally) and "Western" people. On the one hand, Western thought/culture is simplistically equated with the ultra-rationalism of Cartesian philosophy...a mechanistic paradigm...[and] dualistic ontology that posits a radical dichotomy between humans and nature... [even a] Baconian (Capitalist) ethic of a "domination" over nature' (2006: 25).

Across such accounts, western people's relationship with nature and especially with animals is presented as 'impersonal, detached, anthropocentric and disparaging, and their culture generally one of domination and oppression' (Ibid.). Indigenous or tribal peoples, by contrast, tend to be characterised, or caricatured, as living lives that revolve around 'trust, giving, reciprocity, sacramentality, or a 'benign' attitude towards animals' (Ibid.). Whilst Brian Morris recognises 'all people have much to learn from studying the social life and culture of tribal peoples' (Ibid.), he takes issue with this 'crude and simplistic' dualism. Instead, Brian Morris is keen to emphasise that 'culture must not be understood in a monolithic fashion' (Ibid.). Within any individual or society 'there always exists a repertoire of cultural ideas... a multiplicity of co-existing, and often contradictory, cultural forms' (2000: 12). In a phrase that reverberates through the papers in this issue, Morris observes,

> '[P]eople's relationship to nature, and specifically animals, is, in all societies, always one that is complex, diverse and multifaceted, and even contradictory, embracing many different perspectives on the world – empirical, pragmatic, practical, aesthetic, realist and sacramental' (Morris 1998: 168–70).

We could extend this view to human relations with microbes, plants, trees, and multispecies landscapes such as forests, mangroves, river catchments and mountain ecosystems. Studying stories, myths and symbols in the places where we find them offers important clues as to how coordination may be achieved across human and non-human projects, and how different interspecies coordinations make 'landscape assemblages coalesce' (Tsing, in Lindblad and Furmage 2016).

Symbolism in a Time of Shimmering Frontiers

So, the Anthropocene simultaneously heralds a more 'human-centred' approach to our world and also demands we shift attention towards a humanity that is distributed through other species and entities. To do this we must attend to the specificities of place; and by this we mean the multispecies assemblages that come together in place. To move in this direction, we require a deeper understanding of the 'meanings attributed to places by people who live, work, play, and/or otherwise occupy these places' (Williams et al. 2013: 19). By drawing conservation towards a nature that is not singular or external to human society but instead interfused with so many human and nonhuman world-making projects, it also 'does away with the fiction that these challenges can be solved by recreating ontological dualisms – creating fences between nature and society, and then violently policing these (Nustad 2014: 68).

At the level of place, conservation comes face-to-face with landscapes that are always products of variable human and nonhuman histories, with multiple pathways that are sensitive to human intervention (Scoones 1999). Here, the god's-eye view of Enlightenment science is replaced by a humbler recognition that ecological systems are often highly unpredictable, knowledge of ecological systems is always incomplete, and surprise is therefore inevitable (Aisher 2007; Holling 1993). The decline of the nature-culture dyad has also made way for new narratives that decentre humans, and what leading scholars in the environmental humanities describe as a new 'attentiveness to nonhuman storying of places' (van Dooren and Rose 2012: 1).

This has led to a radical reframing of debates about the influence of animal and plant 'symbols' in human life. Studies of animals as symbols can be traced back to the emergence of anthropology as a discipline in the nineteenth century, when anthropology was still a field of natural history. In texts like Lewis Henry Morgan's 'The American beaver and his works' (1868) we glimpse a very human concern with animals, one that carried through into modern anthropology. Brian Morris writes,

> 'Ever since the emergence of modern humans and human culture around 100,000 years ago, humans and animals have co-existed in close proximity. Indeed, humans and

> animals have long shared the same life world, and the relationship between humans and animals has always been one that is complex, intimate, reciprocal, personal and crucially ambivalent. For humans have always recognised both their continuity (kinship) with animals and their fundamental differences' (2000: 19).

This longstanding disciplinary interest in animal symbolism came to the forefront in classic twentieth century ethnographies by such influential ethnographers as Evans-Pritchard, Douglas, Lévi-Strauss, Radcliffe Brown and Leach (Kirksey and Helmreich 2010: 550). Such studies foregrounded the role of animals not only in human economic and livelihood practices but also their roles in cultural and religious systems of totem and taboo. Nourished by the Kantian taproot of anthropology, such work synergised with a longstanding interest in anthropology with systems of classification. Strauss and Orlove capture this changing spirit of engagement: 'Where earlier generations of anthropologists looked at animals as resources that could provide food, hides, wool and labor... [these] studies explored the cognitive, symbolic and ritual dimensions of animals' (2003: 5). But such theorists still tended to neglect a critical social fact: 'the way in which these kinds of categories are sustained and mediated through social practice with nonhuman actors themselves' (Smith 2012: 314). Such theorists tended to 'ignore completely the animal side of the relationship, thereby rendering invisible any social dimensions of human–animal interactions' (Mullin 1999: 219, in Nadasdy 2007). Multispecies ethnography sites itself at this shimmering frontier between humans and animals (Derrida 2008). As Fairhead (this issue) notes, it holds a mirror up to our own great 'chain of being' which gives humans a privileged ontological status, placing humans at the top of the classificatory pile and downgrading other animals 'to the realm of fables, folklore and tales; to things symbolic, allegorical and mythic'.

Rather than reducing nature to a conceptual and material resource for human world-making, multispecies ethnography and environmental history foreground the intertwined existence of humans with other life forms: viewing landscapes as multispecies assemblages, they trace the mutually entangled 'worlding' projects of humans and other species (Haraway 2008: 19; Grove et al. 1998). Focussing on multispecies encounters, they aim for more 'symmetrical' portraits than were achievable under modernity (Latour 1993). Symbolism is revealed as more than a mere tool for human world-making.

Place-Based Conservation Through a Multispecies Lens

Whilst earth systems and conservation science has tended to view environmental problems from a planetary perspective, here we privilege locality and place-based forms of knowledge. At one level, prominent social scientists are right to argue, in line with the *Millennium Ecosystem Assessment* (2005), that 'a material rationale for conservation can be justified by the emerging realisation that ecosystems provide supporting, regulating and cultural services that underpin human life and well-being' (Adger et al. 2009: 5). However, the call is clear: we must move beyond anthropocentric notions like ecosystem 'services', 'resources' and 'efficiency' in the human use of landscapes, concepts drained of storied place-based significance. We need at once to centre and also decentre humans within the account. As Adams (2015) explicates, organisations and institutions think differently, not in the embodied manner of local peoples. This underpins his call for 'Conservation 2' studies, and a shift, proposed in this issue, towards place-based conservation through a multispecies lens.

In many respects, the present environmental crisis has compelled anthropologists, environmental historians and conservation practitioners to look more closely at how human ecological relations unfold historically through 'meaningful exchange among human and nonhuman entities' (Whitington 2013: 7). Roncoli, Crane and Orlove capture some implications of this shift when they observe,

> 'Animals, mountains, glaciers, and other landscape features are conceived by local people as more than assets to be managed or measured. They are rather to be embraced as part of a moral universe that includes both humans and nature, and their decline, due to unsustainable use or to climatic change, is mourned as a loss of cultural identity and meaning' (2009: 97).

Only when we capture the meaningful, storied, place-based significance of environmental change can we claim to answer the urgent call for social scientists to understand the present environmental crisis from the inside, founded on a recognition that humans and nature can no longer be purified in the manner that once seemed possible and desirable under modernity (Latour 1993). Founded on a recognition that human life is distributed through the lives of other creatures, the politics of 'encounter' moves to the centre of scholarly concern (Faier and Rofel 2014). Encounters occur in places. As Haraway observes, 'becoming with' animals and other life forms also means inheriting shared histories that require ethical responses (2008:150).

A shift of attention towards place carries implications for the practice of conservation. In the words of a leading conservation theorist Bill Adams, 'the future of conservation will turn on the extent to which a strong individual connection to nature and natural processes is maintained for the world's people in the 21st century' (2004: 236). We believe the stories and histories that emerge out of the study of multispecies landscapes will aid 'conservation in the 21st century to build a new constituency in the public mind' (Adams 2004: 239).

Place-based conservation begins with a recognition that resource management is deeply rooted in human (and nonhuman) senses of place (Williams and Stewart 1998). It attends to the diverse, historically-grounded and often contested meanings and practices that already exist in places, and which are critical to the social and political dynamics of 'natural resource' management. Giving special attention to the

cultural, historical and symbolic significance of places and how they are 'interpreted, narrated, understood...felt and imagined... and inevitably contested' (Gieryn 2000: 465), it demands 'a fundamental repositioning between a scientific/technical view from nowhere and a more appreciated and enriched view from somewhere' (Williams et al. 2013: 11).

In line with the aims of place-based conservation, the case studies in this issue examine the place-specific values, meanings and relationships that inform human relationships with other species. The issue aims to contribute to place-based conservation by foregrounding the forms of knowledge through which human collectives in the Global South negotiate their own enduring 'connection[s] to nature and natural processes' (Adams 2004: 236), dynamics that so often are erased at broader scales of analysis.

Our scholarly concern emerges out of the distinct and unique qualities of place as an anchoring concept. Unlike a 'resource', which has utility for certain human purposes, places contain human and also nonhuman stories, meanings and significance. A place is not simply materially carved out of space. As much work on the anthropology and history of landscape emphasises, places are also remembered, experienced, felt, discussed and imagined (Feld and Basso 1996; Damodaran 1997). Each place is unique in the way it contains meanings, often carried in symbols and stories, and these meanings are often themselves politically contested.

Understanding the social processes that create and transform places is hence essential to advancing place-based conservation. A 'spatial turn' (Pugh et al. 2009) entails a series of epistemological and methodological shifts, including the modeling of complex social-ecological dynamics at multiple scales, attention to local knowledge, and close examination of the historical, cultural, and symbolic significance of places (Williams et al. 2013). As these papers show, this also entails theorising the messy and surprising features of global interactions; the 'friction' (Tsing 2004: 4) produced by the awkward, unequal, unstable and creative qualities of cross-scale connections and interactions.

Place-based conservation therefore offers a sharp contrast to top-down 'fortress conservation', colonial conservation, and the disturbing neo-protectionism characteristic of the present era, which amplifies the economic power of corporate conservationist organisations.[4] As studies in this volume attest, power must be central to our concerns. As Hart et al. (2010) observe, when a small elite of humanity is in fact driving the transformations, the term 'Anthropocene' itself is a misnomer. Adams speaks for many anthropologists when he cautions: 'we cannot let the term sustainability be owned only by powerful, wealthy, international actors' (Adams 2015). It is the 'socially negotiated, politically contested quality' (Williams et al. 2013) of places that makes place such a powerful lens for understanding natural resource management. Dispensing with the 'view from nowhere' (Nagel 1986) central to the Enlightenment ideal of science, we return as we must to the specificities of place, as it is experienced by people and other species. As Bray and Velázquez (2009:13) put it:

> 'A world is coming where most conservation will be "place-based", deriving its legitimacy from multiscale and participatory governance, and displacement-based conservation will be consigned to the dustbin of history'.

Conservation science rooted in place sets out in a different direction. It shares a deep recognition that the sheer diversity of human knowledge systems and livelihoods is one of our species greatest assets (Reuter 2013). It is closely aligned with international calls for 'small-scale, place-based social science studies of people's experiences of and responses to environmental change' (Moser et al. 2013). It is also alert to matters of history, culture and power (Brosius 2006) and recognises conservation as a form of place-based politics (Agrawal and Redford 2009). Liberating biodiversity protection from 'the confines of bounded protected area rubrics and spaces' (Peterson et al. 2010), it also foregrounds 'the abundant biodiversity found in the cultural and ecological matrices that hold no clear borders' (Ibid.). Aligned with studies of biocultural diversity and indigenous environmental knowledge, it aims to uncover diverse 'adaptive tools deployed by human societies' (Maffi and Woodley 2010) and align the values of international conservation with those of the indigenous communities 'whose cooperation and support are vital' (Walter and Hamilton 2014). It aims for more participatory and inclusive conservation practice, emphasising local and bottom-up decision-making processes, seeking thereby also to balance the all-important equation between poverty alleviation and biodiversity protection (Bray and Velázquez 2009).

We are not proposing an equilibrium-based model of people in harmony with nature. Latour rightly speaks of the violence of the encounter (Latour 2004). By recognising how the politics of place are embedded in historical contingencies, the focus of study moves towards models of the landscape also that emphasise disequilibrium (Scoones 1999) and the co-evolution of people with their changing environments (Norgaard and Kallis 2011; Weisz and Clark 2011). These are the spaces from which answers to the current predicament will arise: a more place-based conception of ourselves as a species. We strongly believe it is at this level, which recognises interspecies relationships and multispecies histories rooted in place, that the emancipatory imaginings will emerge.

Contributions in this Issue

The field of enquiry of this issue radiates from the scholarship of Brian Morris, one of the most thoughtful and compelling 'anarchist ecologist' and interdisciplinary scholars of contemporary times. Brian Morris retired recently as Professor of Social Anthropology at Goldsmiths University, London. He has worked extensively in India and Africa, starting out with his fieldwork among a hunter-gatherer people in South India. As an ethnographer, he has published books on the anthropology of religion, conservation in Africa, conceptions of the individual in western and nonwestern contexts, the historical roots of

ecology, traditional medicine, ethnobotany and ethnozoology, classification and symbolism and the political history of anarchism. His many publications over the years have grappled with critical issues of conservation, wildlife and ecology and environmental history, which he has examined through the lens of culture, social power and politics. Across several decades, Brian Morris has developed a consistently persuasive set of conceptual connections between science and society. The papers in this issue pay tribute to one of the finest scholars of our generation by aiming to set up a useful conversation between science (biology, animal studies, conservation) and society (environmental history, political ecology and political economy).

By focussing on the Global South in this issue we cover regions that Brian Morris worked in and areas that have often been under-researched. By highlighting networks, spaces and narratives we hope to trigger new conversations about the role of animals and plants in human world-making. Building on Brian Morris' attention to the dialectical relationships between human cultures and the natural world, the papers offer place-based accounts of how humans imagine and transform the environments they live in, and how interspecies relations at the heart of changing environments get embedded in 'culture'. Each paper explores how people imagine the landscapes they inhabit through the classifications, images, stories and meanings that underpin common practices (Levy and Spicer 2013; Taylor 2002). The authors engage with themes we encounter across Brian Morris' works: meticulous analysis of local categories and scientific taxonomies, environmental histories, and the examination of capitalist appropriation of resources. Each paper articulates a unique place-based response to a theoretical question at the centre of both multispecies scholarship (Candea 2010) and place-based conservation: what counts as a social relation and who can participate?

Resisting the tendency in some biodiversity conservation work to elevate the status of nonhuman actors to the detriment of the humans with whom they share landscapes, the papers focus on human centres of meaning, the perspectives of people for whom place-based conservation really matters; not just the 'us' of a concerned cosmopolitan minority, but the majority world of people in the Global South negotiating their ways in a world of rapacious financial capitalism, state-making projects and international conservation projects. Across these papers, we are presented with the diverse meanings of distinct species and multispecies assemblages, upon which, human worlding is founded. We see how human relationships with symbolically significant species drive the historical emergence of complex multispecies landscapes.

Building on Morris's history of mammal conservation in Malawi (2001; 2004), Ambika Aiyadurai's paper, 'Tigers are our brothers: understanding human-nature relations in the Mishmi hills, Northeast India', explores the recent history of wildlife conservation in the tribal state of Arunachal Pradesh. Situating itself at the turbulent interface between top-down conservation interventions by the Indian state and international NGOs and bottom-up values linked to local indigenous environmental knowledge, the paper examines the taxonomic proximity of humans and tigers, but also layers of separation, as tiger cubs, in the name of conservation, are moved from the Mishmi hills into a global network of tiger sanctuaries as part of Project Tiger. The place-based knowledge and interests of tribal communities in the Dibang Valley grinds against the interests of international conservation organisations, forestry officials and the Indian government. She shows how the 'contested imaginaries' (Levy and Spicer 2013) of indigenous groups and non-local conservation organisations can quickly erode the collaboration needed for effective place-based conservation, leading to conflicts between local people and conservation organisations, and in some cases with the very animals such organisations seek to conserve.

Of the various human activities currently threatening biodiversity across the planet, trade in wildlife is among the largest direct threats to species survival. The pangolin, currently the world's most trafficked mammal, is undergoing population collapse across South and Southeast Asia, primarily because of the value attributed to its meat and scales. Acknowledging the complex symbolism surrounding specific animals, Alex Aisher's paper, 'Scarcity, alterity and value: decline of the pangolin, the world's most trafficked mammal', examines the different values that drive hunting and consumption of pangolins. Responding to a call for greater consideration of place-specific meanings, values and relationships in management practice, he examines the nonlinear interaction of scarcity, alterity and value at different points along the commodity chains linking hunters of the Nyishi tribe in the Eastern Himalayas and consumers of the pangolin meat and scales as part of Traditional Chinese Medicine in China and Vietnam. The paper shows that while in many settings the nonlinear interaction of scarcity, alterity and value drives overexploitation - at times forming into a highly destructive overexploitation vortex - in some indigenous settings scarcity, alterity and value can interact in a way that drives conservation of vulnerable species.

Who speaks for ecosystems? What legal rights do multispecies assemblages possess? In her paper 'Sustainable development? Controversies over prawn farming on Mafia Island, Tanzania', Pat Caplan explores the ecological implications of conflicting symbolic meanings and economic and political values surrounding a marine ecosystem. Here, the place-based knowledge and meanings of local communities come up against corporate and government interests. Set against a backdrop of a neoliberal climate in Tanzania that has increasingly welcomed outside investment and institutional practices of mapping, environmental auditing and environmental impact assessments, the paper rotates through the overlapping and contrasting perspectives of corporate, state and local stakeholders vying for, and resisting, the creation of an industrial prawn farm on Mafia Island. Drawing on several decades of fieldwork in this part of East Africa, Caplan documents the complex dialectical relations between humans and the 'natural resources' available in the site of a planned prawn farm. Exploring the contested symbolic and economic values held by powerful and sometimes corrupt non-local actors, the paper traces the contours of a multispecies

politics driving the future of this fragile marine ecosystem in East Africa.

Over the twentieth century and into the twenty-first century, plant biodiversity has rapidly declined across the tropics. In 'Conceptualising 'core' medicinal floras: a comparative and methodological study of phytomedical resources in related Indonesian populations', Roy Ellen and Rajindra Puri build directly on Brian Morris' contribution to anthropological studies of taxonomy, ethnobotany, traditional medicine and ethnopharmacopoeias (Morris 1998; 2006; 2011). Through detailed examination of the classification of ethnopharmacopoeias among several indigenous groups in island Indonesia, the authors develop a classificatory system that refines analyses of the impacts of biodiversity loss upon traditional medicine systems. Taking a critical realist and empiricist approach to their materials, the authors develop a nuanced place-based classification of plant resources according to culturally significant domains and resource tiers. Following Brian Morris (2013) in pursuing a methodology that relies on hardheaded straightforward empiricism in order to make a counterintuitive point, the authors conclude that declining resource pools of tropical plants may have less impact on traditional knowledge systems and medicine practice in this part of Indonesia than many conservationists - particularly those focussing on rare 'jungle' species - may expect.

In Africa, as elsewhere on the planet, pandemics never manifest simply as eruptions of unwanted 'nature'. In 'Termites, mud daubers and their earths: a multispecies approach to fertility and power in West Africa', James Fairhead returns to the roots of anthropology as a comparative project. Building on Brian Morris' study of the cultural significance of insects (2004), James Fairhead explores the meaning of 'insect earths' produced by termites and mud dauber wasps and the multispecies practice of consuming these 'insect earths'. Through a wide-ranging ethnographic enquiry into local discourses about the value of earth-eating practices for human health and fertility, the author follows termites and mud dauber wasps through interrelated, but often overlooked, domains, including animal behaviour and physiology, human-animal relations, poverty, nutrition, health, fertility, architecture and social organisation, building towards a portrait of how some symbols rooted in the 'natural' world organise societies and histories of ideas. Pressing home the uncomfortable reality that multispecies encounters may also manifest, in the case of ebola, as 'virulent ecologies' (Tsing 2015), Fairhead argues that attending to multispecies complexes may also provide the 'paradigmatic shift' required for a new coherence to emerge in scholarly accounts of human-nature interactions.

Over his long career, from his earliest study of the Hill Pandaram in South India (1982), Brian Morris has focussed on the historical and political dynamics arising out of human economic engagement with the 'natural world'. In 'Tree symbolism in the Pare Mountains', Pauline von Hellermann analyses how sacred groves and colonial and postcolonial plantation initiatives have symbolically and materially shaped the Pare mountains landscape in East Africa. Engaging with debates in environmental history and studies of tree symbolism that reach back to the birth of anthropology, this paper explores the multiple, overlapping histories and contemporary meanings of three important forest types. Unpicking the symbolic meaning of sacred groves, fruit forests and plantation forests, the latter associated with 'progress' and ideas of 'modern' land management, von Hellermann examines how the contemporary religious and economic meaning of these forests have their roots in political, economic and cultural histories and 'resource management' decisions dating back generations.

Conservation of forests will remain a central pillar of sustainability in the contemporary era of climate change. Carbon trading has rapidly become a critical foundation of international attempts to conserve forests. In 'The forest of our lives: in and out of political ecology', Bengt G. Karlsson takes us to the heart of the political ecology of forests. Like a crystal turned in his hand, Karlsson offers an auto-ethnographic portrait of forests in three settings: 'indigenous forests' and 'carbon forests' planted as part of REDD+ scheme in Northeast India, 'urban forests' in Kenya, and 'industrial forests' in Sweden. Karlsson stands witness to what happens when place-based values and knowledge of species and multispecies landscapes are swamped with new meanings as they are commodified, traded and exchanged by powerful outside interests. Forests that are 'imagined, felt, even loved' scrape against global networks of power and financial capital. The paper reveals the confusion and uncertainty surrounding novel classifications, and the determining influence of contested imaginaries, as different political actors lay claims upon them.

Human-wildlife conflict is a growing problem worldwide. Sharing multispecies landscapes with large predators will remain a core concern within conservation into the twenty-first century. Human-animal conflict will increase as habitats are lost and human populations increase. In his paper 'A cultural herpetology of Nile crocodiles in Africa', Simon Pooley offers an environmental history that details how human-crocodile encounters have been shaped by political, economic and cultural forces. Building on Brian Morris' longstanding commitment to exploring the historical and cultural complexity of human-animal interactions (1998; 2000; 2006), Pooley explores the diverse and at times conflicting meanings and values that emerge out of indigenous and non-indigenous (colonial) encounters with crocodiles. Intimately tied to interspecies conflicts, crocodiles emerge in a range of symbolic forms, including brutal predators to be exterminated, intermediaries with the spirit world, symbols of chiefly authority, revealers of truth, and criminals. Through a series of lucid historical and colonial accounts, Pooley locates the disjunctures and overlaps between colonial and native African perceptions of human and crocodile predation upon each other, and the deep emotional and symbolic relationships that drive conflict and, in some contexts, peaceful cohabitation with these powerful predators.

Despite the rapid decline of biodiversity in the contemporary era, animals and plants will remain with us into the future as primary agents in human worlding. As multispecies scholarship

affirms, 'no organism can become itself without the assistance of other species' (Tsing 2013b: 46). In her paper 'Animals' role in proper behaviour: Chewa women's instructions in south-central Africa', Leslie F. Zubieta explores the vital role animals play in the cultural reproduction of 'human' realities. She explores the points of contact where the vitalities of animals enter directly into human realities, and how specific animals symbolically order and ground human experience and identity. Through the female rite of initiation called Chinamwali, Zubieta unravels the multispecies meanings of 'ovals, circles, rows of lines made out of dots, snake-like forms, and spread-eagled designs' painted onto the walls of caves and rock shelters in the mountains of south-central Africa. Interwoven with Chewa perceptions, elephants, baboons, hyenas and other symbolically important animals emerge as normative guides for the human *Umwelt;* potent symbolic presences that transform the identity of female Chinamwali initiates. Exemplifying a claim at the heart of multispecies ethnography that 'human nature is an interspecies relationship' (Haraway 2008: 19), animals, like plants and multispecies assemblages in the places we find them, 'challenge us to be human through them' (Tsing, in Lindblad and Furmage 2016).

If the Anthropocene brings with it an ethical demand 'to inhabit this world in a spirit of mindful accountability to life, as an immense, intergenerational, heritage' (van Dooren 2012: 232), each paper contained in this issue sheds its own unique light on the diverse ways humans continue to draw upon the more-than-human world in order to become human. It is here that we can seek to locate the emancipatory beginnings of a good Anthropocene.

NOTES

1. In her book *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (2015), Anna Tsing offers insights into the value of 'multispecies assemblage' as a guiding concept; one which highlights the interplay of many organisms' actions, their entangled ways of life, and their patterns of unintentional coordination. As Tsing puts it, multispecies assemblages 'show us potential histories in the making... Assemblages don't just gather lifeways; they make them' (2015: 25).t.
2. See Richard Grove and Vinita Damodaran, 'Environment', in *The Ashgate research companion to Modern Imperial Histories,* p. 567.
3. By ignoring local experience, conservation theorists can replicate the same problems of simplification and over-generalisation that development theorists confront, in some cases reducing indigenous knowledge to 'a convenient abstraction which consists of bite-sized chunks of information that can be slotted into Western paradigms, fragmented and decontextualised; a kind of 'quick fix' if not a panacea [that serves] generalisable and universal solution[s]' (Ellen and Harris 1999: 184).
4. The recent framing of the neo-protectionist agenda by the head of the Nature Conservancy Council is particularly worrying, where the terms of the debate are framed as nature to be tended like a 'garden'. This historical nuance harks back to a green imperialism and the institution of the botanic garden in the colonial empires, a notion that emerged in debates about Nature as a rigidly defined mode of perceiving, assessing and classifying the world.

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